[Federal Register: July 18, 2000 (Volume 65, Number 138)]
[Rules and Regulations]
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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 99-NM-66-AD; Amendment 39-11799; AD 2000-12-21]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 747-400 Series Airplanes Equipped with Pratt & Whitney PW4000 Series Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; correction.

SUMMARY: This document corrects information in an existing airworthiness directive (AD) that applies to certain Boeing Model 747-400 series airplanes. That AD currently requires installation of a modification of the thrust reverser control and indication system and wiring on each engine; and repetitive functional tests of that installation to detect discrepancies, and repair, if necessary. This document publishes Appendix 1, which was referenced in, but inadvertently omitted from, the existing AD. Appendix 1 describes procedures for a functional test to detect discrepancies of the additional locking system on each engine thrust reverser. This correction is necessary to ensure that operators have the procedures necessary to perform the required functional test.

DATES: Effective July 28, 2000.

The incorporation by reference of certain publications listed in the regulations was approved previously by the Director of the Federal Register as of July 28, 2000 (65 FR 39079, June 23, 2000).

FOR FURTHER INFORMATION CONTACT: Larry Reising, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2683; fax (425) 227-1181.

SUPPLEMENTARY INFORMATION: On June 14, 2000, the Federal Aviation Administration (FAA) issued AD 2000-12-21, amendment 39-11799 (65 FR 39079, June 23, 2000), which applies to certain Boeing Model 747-400 series airplanes. That AD requires installation of a modification of the thrust reverser control and indication system and wiring on each engine; and repetitive functional tests of that installation to detect discrepancies, and repair, if necessary. That AD was prompted by the results of a safety review, which revealed that in-flight deployment of a thrust reverser could result in a significant reduction in airplane controllability. The actions required by that AD are intended to ensure the integrity of the fail-safe features of the thrust reverser system by preventing

possible failure modes, which could result in inadvertent deployment of a thrust reverser during flight, and consequent reduced controllability of the airplane.

Need for the Correction

Since the issuance of that AD, the FAA discovered that Appendix 1 was inadvertently omitted from the final version of the AD. Appendix 1 is referenced in paragraph (b) of the AD as the appropriate source of procedures for the functional test to detect discrepancies of the additional locking system on each engine thrust reverser. Appendix 1 was published in the notice of proposed rulemaking (NPRM), which preceded the final rule. No comments affecting the procedures described in Appendix 1 were received in response to the NPRM.

The FAA has determined that a correction to AD 2000-12-21 is necessary. The correction will add Appendix 1 to the existing AD to ensure that operators have the procedures necessary to perform the functional test required by paragraph (b) of the AD.

Correction of Publication

This document adds Appendix 1 and correctly adds the AD as an amendment to section 39.13 of the Federal Aviation Regulations (14 CFR 39.13).

The AD is reprinted in its entirety for the convenience of affected operators. The effective date of the AD remains July 28, 2000.

Since this action only adds procedures to make it possible for operators to accomplish the AD, it has no adverse economic impact and imposes no additional burden on any person. Therefore, the FAA has determined that notice and public procedures are unnecessary.

List of Subject in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Correction

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39–AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§39.13 [Corrected]

2. Section 39.13 is amended by correctly adding the following airworthiness directive (AD):

[Federal Register: June 23, 2000 (Volume 65, Number 122)]
[Rules and Regulations]
[Page 39079-39081]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 99-NM-66-AD; Amendment 39-11799; AD 2000-12-21]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 747-400 Series Airplanes Equipped with Pratt & Whitney PW4000 Series Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Boeing Model 747-400 series airplanes. The AD requires installation of a modification of the thrust reverser control and indication system and wiring on each engine; and repetitive functional tests of that installation to detect discrepancies, and repair, if necessary. This amendment is prompted by the results of a safety review, which revealed that in-flight deployment of a thrust reverser could result in a significant reduction in airplane controllability. The actions specified by this AD are intended to ensure the integrity of the fail-safe features of the thrust reverser system by preventing possible failure modes, which could result in inadvertent deployment of a thrust reverser during flight, and consequent reduced controllability of the airplane.

DATES: Effective July 28, 2000.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of July 28, 2000.

ADDRESSES: The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Larry Reising, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2683; fax (425) 227-1181.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain Boeing Model 747-400 series airplanes was published in the Federal Register on December 28, 1999 (64 FR 72579). That action proposed to require installation of a modification of the thrust reverser control and indication system and wiring on each engine; and repetitive functional tests of that installation to detect discrepancies, and repair, if necessary.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Support for the Proposed Rule

One commenter states that it has no objection to the proposed rule and does not anticipate any adverse impact due to the proposed rule.

Request to Reference Previous Revisions of Service Bulletins

Two commenters request that the FAA revise the proposed rule to reference Boeing Service Bulletin 747-78-2155, Revision 1, dated January 30, 1997, as an acceptable source of service information for accomplishment of the actions specified in paragraph (a)(1) of the proposed rule. [The proposed rule referenced Revision 2 of Boeing Service Bulletin 747-78-2155, dated November 5, 1998, as the appropriate source of service information for the actions specified in paragraph (a)(1).] One of the commenters also requests that the FAA revise paragraph (a)(2)(iii) of the proposed rule to reference Boeing Service Bulletin 747-78-2154, Revision 1, dated November 2, 1995, and Revision 2, dated October 31, 1996, as acceptable sources of service information. [The proposed rule referenced Revision 3 of Boeing Service Bulletin 747-78-2154, dated December 11, 1997, as the appropriate source of service information for the actions specified in paragraph (a)(2)(iii).] One of the commenters, an operator, states that it has already modified its Model 747-400 series airplanes using Boeing Service Bulletin 747-78-2155, Revision 1. The other commenter notes that the earlier issues of the service bulletins are similar to the revisions referenced in the proposed rule, which only made corrections of typographical errors and clarifications of illustrations.

The FAA concurs with the commenters' requests. The FAA has reviewed and approved Boeing Service Bulletins 747-78-2155, Revision 1, and 747-78-2154, Revisions 1 and 2, and finds that they are substantially similar to the later revisions of the service bulletins referenced in the proposed rule. Accordingly, two new notes (Note 2 and Note 3) have been added to this final rule to give credit for accomplishment of the actions in paragraphs (a)(1) and (a)(2)(iii) of this AD prior to the effective date of this AD in accordance with the earlier revisions of the service bulletins described previously.

Request To Specify Terminating Action

One commenter requests that the proposed rule be revised to specify that, for airplanes having line numbers 1067 and higher on which the intent of Boeing Service Bulletin 747-78-2155 was accomplished during production, this AD is terminating action for AD 94-15-05, amendment 39-8976 (59 FR 37655, July 25, 1994). The commenter states that this is not clear in the proposed rule.

Because paragraph (a) of this AD does not apply to airplanes having line numbers 1067 and higher, the FAA infers that the commenter is requesting that paragraph (b) of the proposed rule be revised to state that accomplishment of the functional test in that paragraph constitutes terminating action for the actions required by AD 94-15-05. The FAA concurs with the commenter's request. Paragraph (a) of AD 94-15-05 requires various inspections and functional tests of the thrust reverser

control and indication system, and correction of any discrepancy found, on Boeing Model 747-400 series airplanes powered by Pratt & Whitney PW4000 series engines. For airplanes having line numbers 1067 and higher on which the intent of Boeing Service Bulletin 747-78-2155 was accomplished during production, accomplishment of the repetitive functional tests required by paragraph (b) of this AD constitutes terminating action for the repetitive inspections and functional tests required by paragraph (a) of AD 94-15-05. Therefore, a new paragraph (c) has been added to this AD to state this, and all subsequent paragraphs have been relettered accordingly.

Explanation of Additional Change to Proposed Rule

Paragraph (b) of the proposed rule contains an incorrect reference. That paragraph specifies that any discrepancy detected during the functional test must be corrected in accordance with procedures described in the Boeing 747 Airplane Maintenance Manual. The correct source of service information for the accomplishment of corrective actions is the Boeing 747-400 Airplane Maintenance Manual. Paragraph (b) of this final rule has been revised accordingly.

Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes previously described. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

There are approximately 177 Model 747-400 series airplanes of the affected design in the worldwide fleet. The FAA estimates that 53 airplanes of U.S. registry will be affected by this AD.

For airplanes identified in Boeing Service Bulletin 747-78-2155, Revision 2 (45 airplanes), it takes approximately 510 work hours per airplane to accomplish the required installation, at an average labor rate of $60 per work hour. Required parts will be provided by the manufacturer at no cost to the operators. Based on these figures, the cost impact of the installation required by this AD on U.S. operators is estimated to be $1,377,000, or $30,600 per airplane.

For all airplanes (53 airplanes) it will take approximately 2 work hours per airplane to accomplish the required functional test, at an average labor rate of $60 per work hour. Based on these figures, the cost impact of the functional test required by this AD on U.S. operators is estimated to be $6,360, or $120 per airplane, per test cycle.

The cost impact figures discussed below refer to actions in other service bulletins for the airplanes identified in Boeing Service Bulletin 747-78-2155, Revision 2 (affects 45 U.S.-registered airplanes), that must be accomplished prior to or concurrent with the installation specified in Boeing Service Bulletin 747-78-2155, Revision 2.

It will take approximately 3 work hours per airplane to accomplish the central maintenance computer system modification, at an average labor rate of $60 per work hour. Required parts will be provided by the manufacturer at no cost to the operators. Based on these figures, the cost impact of this modification is estimated to be $8,100, or $180 per airplane.

It will take approximately 2 work hours per airplane to accomplish the changes to the integrated display system, at an average labor rate of $60 per work hour. Required parts will be provided by the manufacturer at no cost to the operators. Based on these figures, the cost impact of this modification is estimated to be $5,400, or $120 per airplane.

It will take approximately 346 work hours per airplane to accomplish wiring provisions for the thrust reverser sync locks, at an average labor rate of $60 per work hour. Required parts will be provided by the manufacturer at no cost to the operators. Based on these figures, the cost impact of this modification is estimated to be $934,200, or $20,760 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39–AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE

Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

CORRECTION: [*Federal Register: July 18, 2000 (Volume 65, Number 138); Page 44432-44434; www.access.gpo.gov/su_docs/aces/aces140.html*]

2000-12-21 Boeing: Amendment 39-11799. Docket 99-NM-66-AD.

Applicability: Model 747-400 series airplanes equipped with Pratt & Whitney PW4000 series engines; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent inadvertent deployment of a thrust reverser during flight and consequent reduced controllability of the airplane, accomplish the following:

Modifications

(a) For airplanes identified in Boeing Service Bulletin 747-78-2155, Revision 2, dated November 5, 1998: Accomplish the requirements of paragraphs (a)(1) and (a)(2) of this AD at the times specified in those paragraphs. Accomplishment of these actions constitutes terminating action for the inspections and tests required by paragraph (a) of AD 94-15-05, amendment 39-8976.

(1) Within 36 months after the effective date of this AD: Install an additional locking system on each engine thrust reverser in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-78-2155, Revision 2, dated November 5, 1998.

Note 2: Installations accomplished prior to the effective date of this AD in accordance with Boeing Service Bulletin 747-78-2155, Revision 1, dated January 30, 1997, are considered acceptable for compliance with paragraph (a)(1) of this AD.

(2) Prior to or concurrent with the installation required by paragraph (a)(1) of this AD, accomplish the requirements of paragraphs (a)(2)(i), (a)(2)(ii), and (a)(2)(iii) of this AD:

(i) Modify the central maintenance computer system hardware and software in accordance with Boeing Service Bulletin 747-45-2016, Revision 1, dated May 2, 1996.

(ii) Modify the integrated display system software in accordance with Boeing Service Bulletin 747-31-2245, dated June 27, 1996.

(iii) Install the provisional wiring for the locking system on the thrust reversers in accordance with Boeing Service Bulletin 747-78-2154, Revision 3, dated December 11, 1997.

Note 3: Installations accomplished prior to the effective date of this AD in accordance with Boeing Service Bulletin 747-78-2154, Revision 1, dated November 2, 1995, and Revision 2, dated October 31, 1996, are considered acceptable for compliance with paragraph (a)(2)(iii) of this AD.

Repetitive Functional Tests

(b) Within 4,000 hours time-in-service after accomplishment of paragraph (a) of this AD, or production equivalent; or within 1,000 hours time-in-service after the effective date of this AD, whichever occurs later: Perform a functional test to detect discrepancies of the additional locking system on each engine thrust reverser, in accordance with Appendix 1 of this AD. Prior to further flight, correct any discrepancy detected and repeat the functional test of that repair, in accordance with the procedures described in the Boeing 747-400 Airplane Maintenance Manual. Repeat the functional test thereafter at intervals not to exceed 4,000 hours time-in-service.

Terminating Action Airplanes Having Line Numbers 1067 and Higher

(c) For airplanes having line numbers 1067 and higher on which the intent of Boeing Service Bulletin 747-78-2155, Revision 2, dated November 5, 1998, was accomplished during production: Accomplishment of the repetitive functional tests required by paragraph (b) of this AD constitutes terminating action for the repetitive inspections and functional tests required by paragraph (a) of AD 94-15-05, amendment 39-8976.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) Except as provided by paragraph (b) of this AD, the actions shall be done in accordance with Boeing Service Bulletin 747-78-2155, Revision 2, dated November 5, 1998; Boeing Service Bulletin 747-45-2016, Revision 1, dated May 2, 1996; Boeing Service Bulletin 747-31-2245, dated June 27, 1996; or Boeing Service Bulletin 747-78-2154, Revision 3, dated December 11, 1997; as applicable. This incorporation by reference was approved previously by the Director of the Federal Register as of

July 28, 2000 (65 FR 39079, June 23, 2000). Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(g) The effective date of this amendment remains July 28, 2000.

Appendix 1.–Thrust Reverser Sync-Lock–Adjustment/Test

1. General

A. There are two sync-locks for each engine thrust reverser. The sync-lock is installed on the lower non-locking hydraulic actuator of each thrust reverser sleeve.

B. The Thrust Reverser Sync-Lock Integrity Test has two tasks:

(1) The first task does a test of the electrical circuit which controls the operation of the sync-lock on each thrust reverser sleeve.

(2) The second task does a test of the mechanical function of the sync-lock on each thrust reverser sleeve.

C. The thrust reverser sync-lock is referred to as "the sync-lock" in this procedure.

2. Thrust Reverser Sync-Lock Integrity Test

A. Equipment–Multi-meter, Simpson 260 or equivalent–
commercially available

B. Prepare to do the integrity test for the sync-locks

(1) Supply electrical power

(2) For the applicable engine, make sure these circuit breakers on the Main Power Distribution Panel P6, are closed:

6F12 ENG 1 T/R IND
6E12 ENG 2 T/R IND
6D12 ENG 3 T/R IND
6C12 ENG 4 T/R IND
6F13 ENG 1 T/R CONT
6E13 ENG 2 T/R CONT
6D13 ENG 3 T/R CONT
6C13 ENG 4 T/R CONT
6F11 ENG 1 T/R LOCK CONT
6E11 ENG 2 T/R LOCK CONT
6D11 ENG 3 T/R LOCK CONT
6C11 ENG 4 T/R LOCK CONT

(3) Open the fan cowl panels for the applicable engine.

C. Do the electrical integrity test for the sync-locks.

(1) Do these steps, for the applicable engine, to make sure there are no "hot" short circuits in the electrical system which can accidentally supply power to the sync-locks:

(a) Remove the electrical connector, D20194, from the sync-lock, V170, on the left sleeve of the thrust reverser.

(b) Remove the electrical connector, D20196, from the sync-lock, V171, on the right sleeve of the thrust reverser.

(c) Use a multi-meter on the plug end of the applicable electrical connector to make sure that these conditions are correct:

D20194 PIN 1	D20194 PIN 2	-3 TO +1 VDC AND CONTINUITY (LESS THAN 5 OHMS)
D20196 PIN 1	D20196 PIN 2	-3 TO +1 VDC AND CONTINUITY (LESS THAN 5 OHMS)

(d) If you find the correct conditions, do the mechanical integrity test for the sync-locks.

(e) If you did not find these conditions to be correct, you must do these steps:

(1) Make a careful visual inspection of all the electrical wires and connectors between the sync-lock and its power circuit.

(2) Repair all the unserviceable electrical wire and connectors that you find.

(3) Use the multi-meter again to make sure there are no "hot" short circuits in the electrical system which can accidentally supply power to the sync-locks.

D. Do the mechanical integrity test for the sync-locks.

(1) Supply hydraulic power.

WARNING: MAKE SURE ALL PERSONS AND EQUIPMENT ARE CLEAR OF THE AREA BEHIND EACH THRUST REVERSER. IF YOU DO NOT OBEY THIS INSTRUCTION, INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR IF THE SYNC-LOCKS DO NOT OPERATE CORRECTLY AND THE THRUST REVERSER EXTENDS.

(2) Move the applicable reverser thrust lever aft to try to extend the thrust reverser with hydraulic power.

Note: If the thrust reverser sleeves do not extend, the sync-locks are serviceable. If the thrust reverser sleeves extend, the applicable sync-lock did not operate correctly.

(3) Replace the sync-lock(s) on the thrust reverser sleeve(s) that did extend when you moved the reverse thrust levers. Repeat steps 2.D.(1) and 2.D.(2) to verify that functional sync-locks are installed.

(4) Move the applicable thrust reverser lever forward to the stow position.

(5) Install the electrical connector, D20194, on the sync-lock, V170 on the left sleeve of the thrust reverser.

(6) Install the electrical connector, D20196, on the sync-lock, V171, on the right sleeve of the thrust reverser.

WARNING: MAKE SURE ALL PERSONS AND EQUIPMENT ARE CLEAR OF THE AREA BEHIND EACH THRUST REVERSER. IF YOU DO NOT OBEY THIS INSTRUCTION, INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN THE THRUST REVERSERS ARE EXTENDED.

(7) Move the applicable thrust reverser aft to try to extend the thrust reverser with hydraulic power.

Note: If the thrust reverser sleeves extended, the sync-locks are serviceable. If the thrust reverser sleeves did not extend, the applicable sync-lock is not serviceable.

(8) Replace the sync-lock(s) on the thrust reverser sleeve that did not extend when you moved the reverse thrust levers. Repeat steps 2.D.(4) through 2.D.(7) to verify that functional sync-locks are installed.

(9) Repeat steps 2.A. through 2.D. for all other engine positions.

E. Put the airplane back to its usual condition.

(1) Move the reverse thrust levers forward to fully retract the thrust reversers on the applicable engine.

(2) Remove the hydraulic power if it is not necessary.

(3) Remove the electrical power if it is not necessary.

(4) Close the fan cowl panels.

Issued in Renton, Washington, on July 11, 2000.

Donald L. Riggin,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 00-18041 Filed 7-17-00; 8:45 am]

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